

What is common to all human beings, in all history, is their ceaseless confrontation by problems, problems, problems. We humans are manifestly here for problem solving and, if we are any good at problem solving, we don't come to utopia, we come to more difficult problems to solve.

-R. BUCKMINSTER FULLER, GUINEA PIG B

Learning is not compulsory... neither is survival.

A Note About Collaboration

"The secret is to gang up on the problem, rather than each other." -THOMAS STALLKAMP

The hard work of changing systems is, by definition, a collaborative effort. In the homeless services sector, "systems" are an aggregation of multiple agencies, organizations, and people. We have been fortunate to work with, and count as supporters, some of the best partners available.

First and foremost, we are profoundly grateful to the 77 communities with whom we have embarked on this bold journey. Through their persistence, hard work, and willingness to take risks, they are forging the path to zero for the rest of the nation.

Our funders have provided invaluable support that has allowed us to work with communities at very low rates, and in many cases, for free. We offer particular gratitude to JPMorgan Chase for funding the creation and publication of this important report, which we have wished to produce for some time.

Our **Implementation Partners**— the United States Department of Housing and Urban Development (HUD), CSH, OrgCode and the Center for Social Innovation— have been an indispensable part of our team and our success. These organizations have made their own resources available to communities, supported our work in the field, and directly advised and coached participating communities alongside our own staff. They have been invaluable thought partners who have helped us make sense of, and extract powerful, actionable lessons from, this work.

We have also benefited greatly from supportive relationships with partners at the US Department of Veterans Affairs (VA), the US Interagency Council on Homelessness, IDEO, the Institute for Healthcare Improvement, the National Alliance to End Homelessness, the National Coalition for Homeless Veterans, and the National League of Cities. All partnerships have moments of great synergy and moments of profound disagreement. These groups have navigated both with grace, patience and good faith leading to improved support and outcomes for our work with communities. We are so thankful for their collaboration.

We are also grateful for the contributions of the Rapid Results Institute, which provided partnership and support to many communities in the first year of this initiative.

Introduction: Setting our sights on zero

In July of 2014, our team at Community Solutions declared a successful end to the 100,000 Homes Campaign, a national movement that saw 186 communities find permanent homes for more than 105,000 vulnerable and chronically homeless Americans in just four years. The Campaign was a groundbreaking success, inspiring new urgency, coalescing a national network of system leaders and frontline workers, dramatically improving local housing processes, and cementing the monthly housing placement rate as a key metric that all communities needed to track. At the same time, the Campaign surfaced a need for new tools and insights to engage with the volatility of homelessness as a dynamic problem. While communities increased their housing placements dramatically, this did not result in our real aim: sizable reductions in the number of people experiencing homelessness.

Journalists, service providers and other stakeholders often frustratingly imagined the Campaign as a fixed model, or worse, a policy platform. These assumptions reflected a longstanding dream in the homeless services sector that a single set of standardized procedures or "right answers" might be discovered that would, alone, be enough to solve the puzzle of homelessness. At times, even our own team fell victim to this seductive idea. But as data from Campaign communities highlights, homelessness is a dynamic problem, and it cannot be solved with a fixed recipe. New people experience homelessness over time, and the phenomenon itself also changes, as we are currently seeing with the intersection of homelessness and the emerging opioid crisis. The data and tools available to communities have traditionally been too slow and cumbersome to respond to such a rapidly changing problem. (Data on the number of people experiencing homelessness has typically been gathered just once a year, for example.) The need is not simply for better resources, policies or interventions, but for a smarter, more adaptive approach to problem solving in communities across the country.

Adequate resources, evidence-informed policy, and proven best practices like Housing First are crucial building blocks. But alone, they are merely the raw materials of an effective response to



100,000 COMMUNITY HOMES SOLUTIONS homelessness. It is the way communities put these building blocks together— the systems they design for integrating and rearranging them in response to a complex and constantly shifting problem— that determines who ends homelessness and who doesn't. We call this insight the Systems Problem, and if the 100,000 Homes Campaign helped us to surface it, we have designed Built for Zero, our follow-on effort and the subject of this report, to help communities solve it.

In January of 2015, we launched Built for Zero (then called "Zero: 2016") as a new campaign designed not to count up to another large housing total, but to help a select group of communities count down to a measurable end to chronic and veteran homelessness. Roughly three years into that effort, seven communities have reached functional zero for veterans— our criteria for measurable and sustainable success— and three have ended chronic homelessness. Another 19 communities are now measurably reducing chronic or veteran homelessness, and 59 communities have achieved the revolutionary ability to track and respond to chronic or veteran homelessness comprehensively, by name and on a monthly basis.

The communities participating in Built for Zero have housed collectively more than 85,000 of their neighbors experiencing homelessness in under three years, and those communities that have reached functional zero are the first in America ever to do so. Even communities that have yet to reach functional zero have made concrete progress toward this goal, and for the first time, we can measure this.



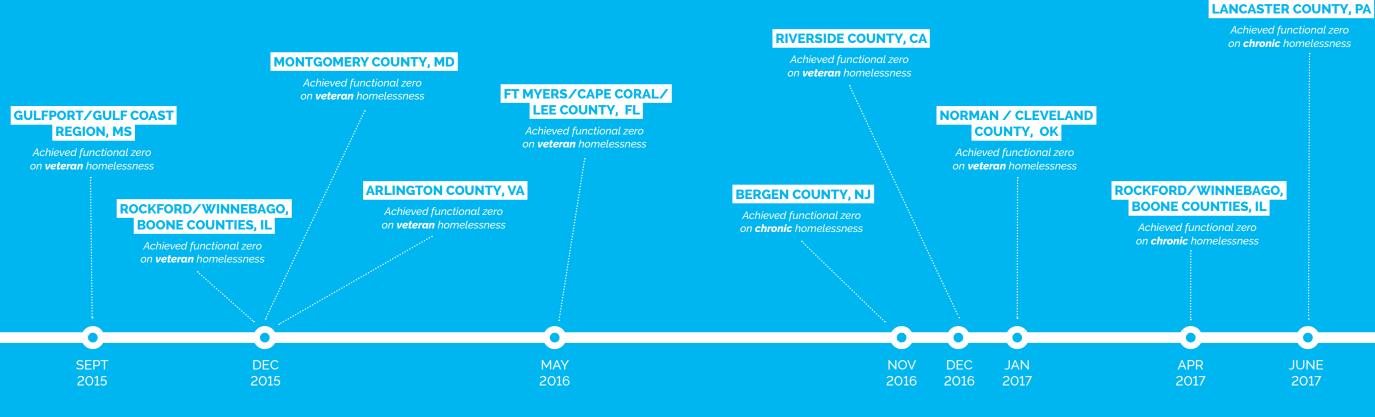


When we launched Built for Zero, no definitions of an end to veteran or chronic homelessness existed, so we developed our own in consultation with many partners. A community has ended veteran homelessness when the number of veterans experiencing homelessness is less than the number of veterans a community has proven it can house in a routine month. It has ended chronic homelessness when the number of people experiencing chronic homelessness is zero, or if not zero, then either 3 or .1% of the total number of individuals reported in the most recent point-in-time count, whichever is greater. (*This definition of an end to chronic homelessness is a revision based on the definition developed jointly by HUD and the US Interagency Council on Homelessness. This definition came out about a year after we published our initial definition, and we felt it was superior to our original effort.*)

These exciting results notwithstanding, it is worth noting that our original goal was to help 75 communities reach zero by the end of 2016. Most organizations don't publish reports about unmet goals or missed deadlines; we think this should change. If the Systems Problem is as essential as we believe, then datadriven iteration and reflection are essential to progress, and in fact, they may be the most critical tools in each community's work to end homelessness. What matters most in our view is to ensure that the housing and homelessness sector has the infrastructure it needs to test new ideas in various contexts, measure the outcomes, and apply the best lessons quickly in the service of definable end states that improve people's lives. We hope this report will help others develop and improve that infrastructure.

We have organized this report into four sections, rooted in our theory of change around how communities achieve success. First, they must define the desired end state clearly and adopt an actionable and objective framework for measuring it. Next, they must develop the reliable ability to track homelessness across their entire geography, at least monthly and on a person-specific basis. Third, communities must apply a quality improvement framework for systems improvement, testing and refining the most promising ideas in order to achieve month-over-month reductions in chronic and veteran homelessness. And once communities reach functional zero, they must work to sustain that outcome, even as they expand to other populations. This critical challenge— not just can we reach zero, but can we hold it and prove that we are holding it— is perhaps the most important one of all.

Functional zero timeline



COMMUNITIES ENDED VETERAN HOMELESSNESS



12 COMMUNITIES REDUCING ACTIVELY HOMELESS NUMBER VETERANS

COMMUNITIES REDUCING ACTIVELY HOMELESS NUMBER **CHRONIC** 85,002 TOTAL people housed

COMMUNITIES WITH REAL-TIME DATA COMMUNITIES SUSTAINING FUNCTIONAL ZERO

DEFINING DTHE END STATE

We designed the 100,000 Homes Campaign to help communities count up to a large housing total together. Only one metric mattered: monthly housing placements. Built for Zero asks them to take on a more complex challenge counting down to zero. To succeed, communities have to measure many variables, not just one.

Ending homelessness is not just a real possibility, it's a foregone conclusion. It can be done.

-MICHAEL FOLEY, CHIEF OPERATING OFFICER LANCASTER COUNTY COALITION TO END HOMELESSNESS



We opened our application process in July 2014 by inviting interested communities to join us on a journey to figure out what it would take to end chronic and veteran homelessness. We launched in January 2015 with 75 communities.

As part of that application process, we sought to apply the Model for Improvement to our planning. The model, first pioneered by Associates for Process Improvement, dictates that change efforts should start by identifying a clear, measurable end state, then develop measures that would confirm changes represent real improvement, and finally, identify iterative strategies which can be refined or replaced in an ongoing capacity, depending on the extent to which they do or don't create progress toward the end state. This is the reverse of how most organizations plan— typically, we assume the strategies or activities we already believe in will get us to our goal, and we clarify that goal based on what we think those strategies might realistically help us achieve.

By choosing to work backwards from a measurable end state, we forced ourselves to confront a serious problem early— despite an agreed upon national timeline for ending chronic and veteran homelessness having been in place for more than four years, no clear, measurable definition of success yet existed in the sector.

Faced with the untenable prospect of launching a national initiative without a clear end state, we decided to develop the first definitions of what it would mean to end chronic and veteran homelessness, respectively, ourselves. We did this in close collaboration with partners in the federal government and participating communities to ensure buy-in and collaborative rigor.

We confronted complicated challenges in developing these definitions:

1. Each community is different. We needed a definition that could apply broadly and in a variety of contexts.

- 2.Homelessness is not static. Our ambitions for this initiative did not include ensuring that no one would ever again experience a housing crisis. We therefore needed a definition that would account for the dynamic nature of the problem by accommodating for new inflow into homelessness and outflow into housing over time.
- 3. Data is only as useful as it is actionable. A definition that was too complex, or by which the number of people experiencing homelessness could not be quickly and objectively assessed, would not be useful for communities seeking to drive improvement over time. It would also harm our ability to convince funders, policymakers and the public that a true outcome had been achieved. We needed a definition that was easily measurable, broadly understandable, and rooted in outcomes, not merely activity.
- 4. What about veterans in transitional housing? People living in certain transitional housing programs are still considered homeless by federal standards, but federal funding structures do not always incentivize these programs to move people into permanent housing as quickly as possible. We needed to decide how to reconcile these two competing realities.

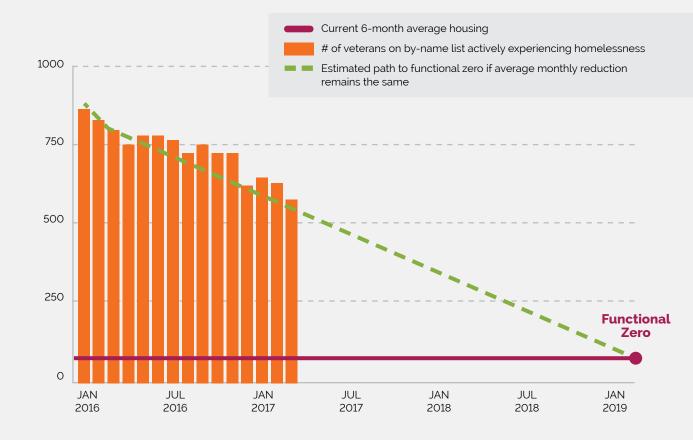
Counting down to zero

In the end, we developed a definition rooted in traditional stock and flow analysis. It was simple, dynamic and easily measurable. Taking a nod from workforce thinking, we termed this initial definition, "functional zero," and every participating community agreed to use it as a condition of their participation:

Initial functional zero definition: A community has reached functional zero for veteran and/or chronic homelessness when it can demonstrate it has fewer people experiencing veteran and/or chronic homelessness than it has proven it can house in a routine month.

- This monthly housing rate is determined by a rolling average of a community's last six months of housing placements.
- Anyone living in transitional housing is still considered homeless.
- Each community is measured across its entire Continuum of Care (CoC) geography, as defined by HUD.

This definition was clear and objectively measurable. It also accommodated the dynamic nature of homelessness in many communities without being overly prescriptive or immune to local context. Crucially, it was not rooted in assumptions about what a community should do, but in concrete data about what a community had achieved. In other words, it privileged an outcome metric— the number of people experiencing homelessness— over process metrics like whether a community had implemented particular best practices. We believed then, and continue to believe, that this focus on the what, rather than the how, has allowed communities to innovate and remain sensitive to context. It has also challenged some of our assumptions about what practices would or would not be necessary in order to achieve success.



A challenge to our definition

In the first year of our work, our partners in the federal government introduced an alternate set of criteria for evaluating whether communities had ended veteran homelessness— the Federal Criteria and Benchmarks for Achieving the Goal of Ending Veteran Homelessness. These criteria and benchmarks are complex and include very specific descriptions of behaviors and practices that communities must implement. They include some objective metrics, like the requirement that a community provide shelter to any veteran who wants it, but they do not set hard targets for how many veterans may remain homeless when a community declares it has reached the goal. Government leaders felt this alternate approach was important in order to preserve their ability to account for local context.

We considered the Criteria and Benchmarks carefully. While they have some clear strengths, we disagreed foundationally with several key elements:

- The standards do not measure the end state they aim to reward. While they require communities to ensure that all veterans are offered housing, they do not require that those veterans ultimately be housed. Veterans who have refused initial offers of housing, veterans who have entered transitional shelter, or veterans who are actively looking for housing but have not yet found it, remain homeless, yet they may be discounted from a community's total. The intention here is not that communities would leave large numbers of veterans homeless, but neither does the measure rule out this outcome.
- They do not allow for a community's progress to objectively reviewed in the same way by distinct parties.
 Because the Criteria and Benchmarks are subject to federal review and subjective assessments of local context, decisions about which communities have satisfied them are not transparent or replicable. This lack of clarity makes it difficult for communities to know if they are making progress and to leverage the Criteria and Benchmarks for improvement.

Our disagreement put us in a bind. We couldn't (and still cannot) do our work effectively without strong coordination with our federal partners. Their role in furthering research, spreading innovation, and securing federal housing resources has been essential to the progress the country has made on homelessness over the last 20 years. We have great faith in their skill, expertise and commitment to ending homelessness. That said, we felt strongly that communities could meet the Criteria and Benchmarks without actually ending veteran homelessness. This dissonance risked leaving an unconscionable number of veterans behind, and we feared it would weaken the public's belief that real solutions were possible.

Ultimately, we elected to maintain our original definition of functional zero for veteran homelessness.

This disagreement raises an interesting question. The hardest remaining problems in the world will require multiple sectors to work together, and yet different sectors often see those problems, and their solutions, very differently. Here's what we did to make sure we could still partner effectively with the federal government in spite of our disagreement:

- We made a shared commitment to respect our disagreements and not to condition further collaboration on their resolution
- We developed shared talking points to help communities understand the differences between the two definitions and that they were not mutually exclusive
- We agreed that both definitions had strengths, and we resolved to help communities pursue both definitions, while remaining clear on what we each believed to be true
- We agreed to celebrate the hard work of communities jointly when they reached either standard

Over the following year, our federal partners began work on a definition of an end to chronic homelessness. We offered our insight and perspective along with other national partners as part of a collaborative process led by HUD and USICH. Ultimately, the government's work produced a definition of ending chronic homelessness that we believed to be superior to our original definition, and we chose to align publicly with this revised standard.

BUILT FOR ZERO DEFINITIONS OF AN END TO VETERAN AND CHRONIC HOMELESSNESS

 $\frac{\text{\# actively}}{\text{Homeless}} < \frac{\text{average}}{\text{monthly}}{\text{Housing rate}} = \mathcal{O}_{\text{zero}}^{\text{functional}}$

$$\underset{\text{HOMELESS}}{\text{HOMELESS}} \overset{\text{# ACTIVE}}{<} \overset{3}{\underset{\text{O.1\% pitcount}}{}^{3}} = \overset{\text{Functional}}{\underset{\text{ERO}}{}^{\text{Functional}}}$$

A community has ended veteran homelessness when the number of veterans experiencing homelessness is less than the number of veterans a community has proven it can house in a routine month. It has ended chronic homelessness when the number of people experiencing chronic homelessness is zero, or if not zero, then either 3 or .1% of the total number of individuals reported in the most recent point-in-time count, whichever is greater.

And end to chronic homelessness should be measured differently from an end to veteran homelessness for one key reason: unlike veteran homelessness, chronic homelessness is primarily a function of time, not affiliation. Unlike veterans, who are classified as "homeless" the day they hit the streets, people must go without a home for more than a year in order to become chronically homeless. A good community system has ample time to connect them to housing before they meet that standard, which means a hard zero (or very close) on chronic homelessness should be possible.

What does our experience reveal about the kind of partnership necessary to tackle complex challenges? For one thing, it has highlighted how difficult dispute resolution can be, especially when a power differential exists between two partners. Still, we maintain that effective partnership requires authenticity, not just cooperation. Our advice to other partnership-based efforts is to stay at the table. Embrace agreement with partners wherever possible in order to maintain a reservoir of good faith that can be drawn on in times of inevitable disagreement. And in those times, persist together. New opportunities for agreement and strengthened collaboration often surface soon.

REAL-TIME, BY-NAME DATA

Imagine you were running a major retail chain like Target, but you could only measure your inventory once a year. We all know you can't run a business that way, yet that's exactly how most US communities track, measure and respond to homelessness! Today, 77% of Built for Zero communities have the ability to assess the scale of homelessness in real time, instead of annually. These communities have seen a dramatic increase in their ability to respond effectively.

These folks that we're helping, we know them now—I can tell you all about them. It makes it a lot more real when you have that by-name list.

The by-name list **revolution**

No community can end homelessness of any kind without comprehensive, real-time, person-specific data on the problem. This has emerged as a gospel tenet of our work.

But it wasn't always this way.

The federal government requires communities to collect data on homelessness on one night in January each year. Data is then extrapolated from these counts to create national estimates of homelessness. In 2015, when we began our work, we analyzed current and historical local point in time data to calculate projected inflow and outflow over the course of a year. We used that information to set monthly housing targets that would put each community on a path to zero. By the end of the first year, more than 20 communities had hit their targets and should have ended veteran homelessness. In reality, only one community had achieved a measurable zero.

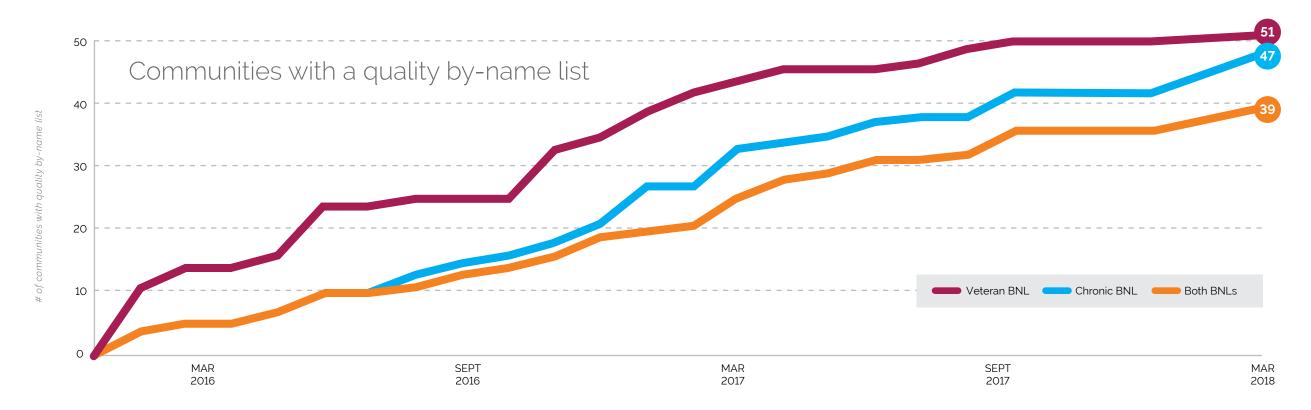
We had stumbled into a critical data problem. Solving it would be crucial to our success and to the success of each local community.

Homelessness is a dynamic, person-specific problem that changes from night to night and from person to person. Yet, we had encouraged communities to benchmark their goals against anonymous snapshot data, collected at a single point in time. That data was insufficient to help local players respond quickly to such a constantly shifting problem.

This highlights the second key component of our theory of change: once communities have identified a clear and measurable end state, they need a rapid feedback loop to tell them how they're doing and to inform quicker, more adaptive decision making. Because it is impossible to predict who will become homeless or how the problem itself may change over time, there can be no fixed recipe or solution, only promising practices and approaches brought together in shifting, context-specific combinations. These combinations must be accountable to community-wide performance data, which must reveal whether a community is driving reliable reductions in homelessness continuously.

The upshot of this insight is that a rapid feedback loop on who and how many people are experiencing homelessness in a community at any given time is a more vital and actionable resource than almost anything else local leaders could possess. It is the essential compass every community needs in order to make decisions at the speed of homelessness. We believe this is the emerging lesson of almost forty years of research and practice in the field.

To some, this insight may sound plain— the technology sector long ago proved the transformative power of real-time data. But homelessness is not a digital problem. Prior to the launch of Built for Zero, many people in the sector believed that reliable, real-time, population-level data could not be attained cost effectively on



homelessness, or for that matter, most other social problem with human beings at the center. (Nevermind the fact that public health workers have been producing such data throughout the developing world for many years using only the simplest tools.)

Imagine the logistics. First, a community would need a methodology for accounting for every person experiencing homelessness at any given time, drawing only on the daily resources available to homeless service providers. Local leaders would also need to develop ways to account rapidly for new inflow into the system, outflow into housing, as well any person who had simply disappeared, and this accounting would need to include those staying in services as well as those sleeping outside. Finally, this data would need to comport with clear standards for quality and reliability— standards which would need to be developed, tested and refined over time.

In 2015, no community in the country had the ability to produce this level of data. The fact 59 US communities now do so for targeted populations with quality and reliability is unprecedented and has rattled our assumptions about what other social problems might be tackled in this way.

Our data team worked with communities and partners to develop a clear, measurable standard for realtime data and tested it over several months. We then developed tools to communicate this standard in ways communities would understand, and to normalize the new behavior. We built simple, user friendly scorecards to help communities know how they were doing against our data standard, and we began working with each community, one scorecard question at a time, to help them improve their data quality.

Today, not only are 59 Built for Zero communities working from a real-time, by-name list of people experiencing homelessness, but many have taken to using their annual point in time count as an opportunity to ensure the comprehensiveness of their list— an excellent use of this community-wide event.

BENEFITS OF A BY-NAME LIST:

SMARTER TRIAGE

- Target limited housing resources to the most vulnerable individuals and families
- Stretch resources further by connecting people to the most cost effective support to meet their needs

IMPROVED SYSTEMS

- Use aggregate data to see trends, flag bottlenecks, and identify improvement opportunities across your system
- Test new strategies and know quickly whether your efforts are reducing homelessness

RESOURCE ADVOCACY

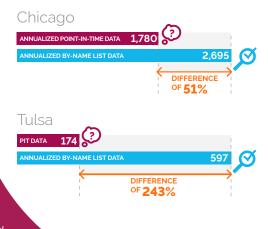
- Ground your advocacy in concrete data
- Use monthly data trends to make stable projections and quantify your projected resource gaps

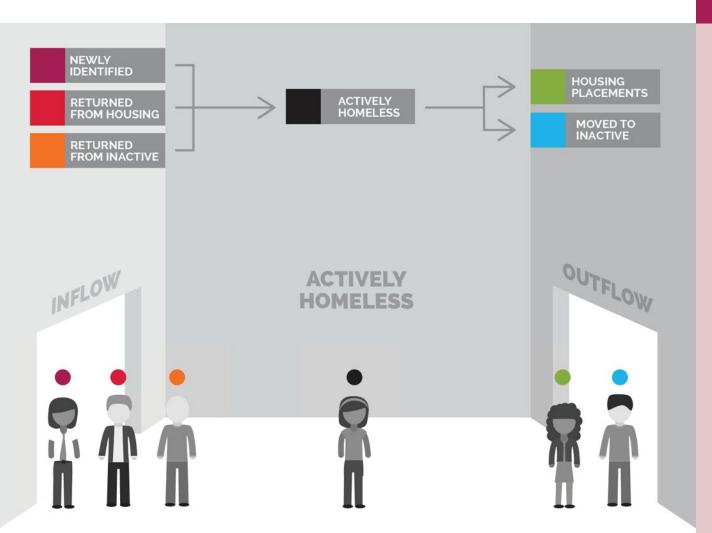
Six data points every community should track monthly

Communities need data on homelessness in real time, but that data must also be person-specific. By-name data ensures communities know who people are and what they need to secure and retain housing. It also gives communities a line of sight into the dynamics of their existing systems.

PIT© VS. BNLØ

Local point-in-time numbers are limited by the fact that they represent a count of individuals experiencing homelessness during one night in January. In 2016, when we retrospectively compared real-time person-specific data over the course of the year to annualized point-in-time data on homeless veterans, we found no connection between the two, with some discrepancies of more than 300%. This confirmed our belief that local teams need dynamic, real-time data in order to continuously measure progress, set short term aims and strategy, and allocate resources.





WHAT MAKES A BY-NAME LIST "QUALITY?"

We've developed a 10-point scorecard that helps communities assess the quality and real-time nature of their byname lists. The scorecard assesses broadly for three elements.

FULL COVERAGE

- All agencies and programs are represented
- List includes people sleeping in shelters and on the streets

IMPROVED SYSTEMS

- List is updated monthly, at a minimum
- As people's housing status changes, those changes are reflected on the list

RESOURCE ADVOCACY

- Each person has a file that includes their name, history, health and housing needs
- Each person can be followed through the system to ensure they get the help they need

DRIVING DMEASURABLE REDUCTIONS

A key lesson of the 100,000 Homes Campaign was that measurably increasing housing placements alone did not correspond to reductions in homelessness. That learning highlighted a growth area for our sector and for our own team, namely that we weren't building our strategy around the real outcome we all wanted to see fewer people experiencing homelessness, not just more people in housing. Achieving reductions has required local actors to adopt key mindset shifts, changes in the way they measure progress, and a commitment to a system-wide problem-solving framework, rather than simply the improvement of program-level outcomes.

Built for Zero has blown the doors off the Collective Impact model. It's helping communities implement Improvement Science in coalition, without sacrificing rigor. I know of just a few initiatives in the world doing this well.

 – NIÑON LEWIS, EXECUTIVE DIRECTOR INSTITUTE FOR HEALTHCARE IMPROVEMENT



Reframing the conversation around **reductions**

MINDSET SHIFTS TO DRIVE SYSTEM-WIDE OUTCOMES

For years, the primary approach to homelessness has been the refinement of technical solutions and best practices in housing and service delivery. This work has dramatically improved what we know as a sector about ending homelessness for a given individual or family. It has also spurred an important realignment of funding priorities at the federal level. At the same time, relatively little research has focused on the question of system-wide outcomes and what it really takes to reduce homelessness across a whole community. Most of us have tacitly assumed that if we could simply get better and better at serving more and more individuals, the collective result would be less homelessness.

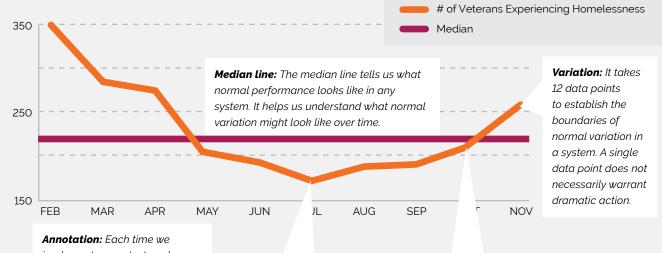
This assumption— that system-wide reductions would be a natural byproduct of improved program-level practice— has not proven accurate. There is, we think, a separate set of questions around system-level practice to which housing and services organizations must commit themselves if we are going to achieve the results we want.

Built for Zero communities have embraced new mindsets around how they measure success to see the system-wide outcome of fewer individuals experiencing homelessness as the key measure of each respective organization's success, rather than focusing on narrower program outcomes. In the old way of working, each provider's success was determined by the extent to which it a) met its grant and funding deliverables, and to a lesser extent, b) achieved positive housing outcomes for the individuals and families in its programs. This encouraged creaming, the practice of screening out difficult cases in favor of the easiest or cheapest clients to serve. In Built for Zero communities, leaders have driven a shift toward a new way of working, which encourages providers to measure their program-level success against the shared community aim of fewer individuals experiencing homelessness each month. This new mindset means providers must be prepared to change their program designs in order to make the greatest possible contribution to reductions. This may mean targeting their resources differently, sharing them more openly, focusing on different populations, or testing new ideas to move individuals through programs more quickly.

This new mindset acknowledges that while technical and clinical expertise are necessary to ending homelessness, alone they are not sufficient to achieve reductions across whole communities. Additional expertise is needed around problem solving and measurement.

HOW TO READ A RUN CHART

A run chart is an essential measurement tool from the field of Improvement Science. It is an excellent tool for tracking a phenomenon like homelessness across a whole community over time. A good run chart can help leaders spot patterns in the data, assess the effectiveness of changes they implement, refine improvement strategies over time, and distinguish between real change and normal variation in a system.



implement a new test or change idea, we annotate our run chart. This way, if the system's behavior begins to change over time, we have some idea of why that change has happened.

Trend: When five data points in a row go in the same direction (or six, on larger run charts), we can diagnose a trend in the system. This is a signal to pay attention— there may be a new normal taking hold. Shift: When six data points in a row fall above or below the median, we can say with statistical confidence that the system has shifted, meaning the definition of normal has changed. regular reduction goals is essential to ending homelessness. But before it can track progress on reductions and set new reduction goals, a community must be sure its data is comprehensive and reliable each month. How can we ever know that this is true? When does everyone on a by-name list really mean everyone?

Built for Zero communities have adopted rigorous standards of system-wide data quality and reliability— already a crucial shift in the sector!— and many now use a simple equation each month to determine the accuracy, and thereby the utility, of their by-name list data for homeless veterans and individuals experiencing chronic homelessness.

The equation is simple: the total number of people identified as experiencing homelessness this month should be the same as last month's number after new inflow is added and new outflow is subtracted. In other words, the measurable universe of people in front of us at any time should be a mathematically predictable function of the ebbs and flows we observe in that universe over time.

If this basic equation (all previously known people + inflow - outflow) doesn't add up to the number of people on a community's current by-name list, then that community has a data reliability problem. We call this "unbalanced data," and any margin above fifteen percent triggers a coaching intervention from our data team.



Unbalanced data can be a result of any number of things, but the most common culprits are as follows:

- A key agency isn't reporting its data well
- The reporting agency has misunderstood key definitions, like what counts as a housing placement
- Street outreach coverage is not sufficiently coordinated and consistent

Once a community addresses the causes of its unbalanced data, it can say mathematically that the number on its by-name list is a true reflection of the number of people experiencing literal homelessness in its community. The community is now in a position to test strategies and observe their effects on this number, characterizing any observable decrease as a true reduction in homelessness.

MEASUREMENT SHIFTS TO DRIVE SYSTEM-WIDE OUTCOMES

The shared aim of Built for Zero communities, to drive reductions that ultimately lead to zero, has necessitated a shift in measurement strategies. If the first goal of each community is to achieve a by-name list that is both comprehensive and reliable, the follow-on goal is to become skilled at using that list for improvement. This process begins with a community's ability to observe and interpret fluctuations in the list as measures of whether homelessness is rising or falling at any given time. Today, we are working with the first communities in the country who can show measurably and with reliable data that they are achieving monthly reductions. There are currently 19, not counting the nine who have already ended chronic homelessness, veteran homelessness or both.

One of the key findings from the 100,000 Homes Campaign, that regularly tracking performance is itself a driver of improved outcomes, has also proven essential in driving impact in Built for Zero. Measuring and setting

COORDINATED PROBLEM-SOLVING FRAMEWORK

More than anything else, framing success in terms of monthly reductions has shifted the way communities build and execute strategy. Traditional strategy building in our sector has suffered from a lack of good data. In response, communities have adhered to a plan-first, measure-later approach to reducing homelessness, amalgamating as many evidence-based practices as possible, implementing them in as many programs as possible, and then hoping for a positive result. This approach produces random outcomes because it is not rooted in meaningful goal setting. Worse, it enables highly imprecise planning. It begins from the implicit assumption that context is irrelevant— that each community should attempt to implement every available solution to every conceivable problem, even if that problem is not a key obstacle between that community and success. In the absence of real data, assumptions and ideology— the things we most want or believe to be true— have driven local strategy.

By contrast, the communities achieving monthly reductions today have adopted the highly actionable framework of Improvement Science. Improvement Science turns the default, assumption-driven planning process on its head by asking each community to set a measurable aim rooted in reliable monthly data on homelessness (the by-name list) and then to test strategies for achieving that aim in rapid, measurable cycles. It produces clear definitions of success and gives communities a method for iterating toward measurable goals.

The by-name list is a natural tool for an improvement-based approach. We have already explained why the list is comprehensive and reliable, but crucially, it is also person-specific. This allows each community to drill down into individual cases to understand what is truly driving increases or stagnancy in that particular system. The chief benefit of this kind of analysis is the ability to identify the highest leverage areas for improvement quickly and to avoid wasting time responding to problems that are not indicated by a community's data, even if those problems have been important or relevant in other contexts.

The Built for Zero Change Package

There is no shortage of ideas and best practices for solving homelessness— many communities are overwhelmed by them! The important thing is to select targeted strategies that respond clearly to problems indicated by a community's data. The Built for Zero Change package is a playbook for breakthroughs— a

digital compendium of more than 200 strategies and ideas, compiled by our team, with accompanying case studies and implementation recommendations. The change package is organized in categories that pertain to the specific types of problems a community may be trying to solve. The goal of the Change Package is not to implement every idea it's to implement and refine the most relevant ideas in each community's context.



For example, suppose the by-name list reveals a process logjam, meaning too few people are moving successfully into housing each month. A targeted community response may involve setting a measurable aim to streamline the housing process, such as completing it in 30 or 60 days, on average. On the other hand, suppose the list reveals that people are moving through the housing process relatively quickly, but an abundance of new inflow is overwhelming the system. In this case, a community may choose to test targeted problem-solving partnerships with key upstream partners to improve diversion or reduce vulnerability to homelessness among key populations. If the majority of new inflow is coming from those who have previously been placed into housing, leaders may focus on improving housing retention practices at the program level. This process of identifying areas for improvement and testing targeted strategies can continue until monthly reductions begin to emerge.

Here, the specificity of the by-name list offers an important antidote to the widespread paralysis of overly structural thinking, which insists that, because the ultimate causes of homelessness are rooted in unequal social and economic arrangements, the only solutions are political realignments, which are typically outside of each community's control. In the past, our sector has been guilty of giving this ideological objection too much power, turning it into an excuse for inaction at the local level. The by-name list, combined with the insights of Improvement Science, offer communities a more precise interpretive lens and an appropriate problem-solving framework for effective response, even as we continue to pursue larger structural reform together.

Critically, the practices that drive reductions at one particular moment may not be the same practices needed to drive continued reductions in the future. The nature of homelessness itself changes over time due to drug and commodity flows, larger political and economic forces or shifting local resource landscapes. Again, there is no fixed recipe for solving homelessness. What matters is a community's ability to assess and respond quickly to changing information.

FOUR THINGS EVERY COMMUNITY NEEDS

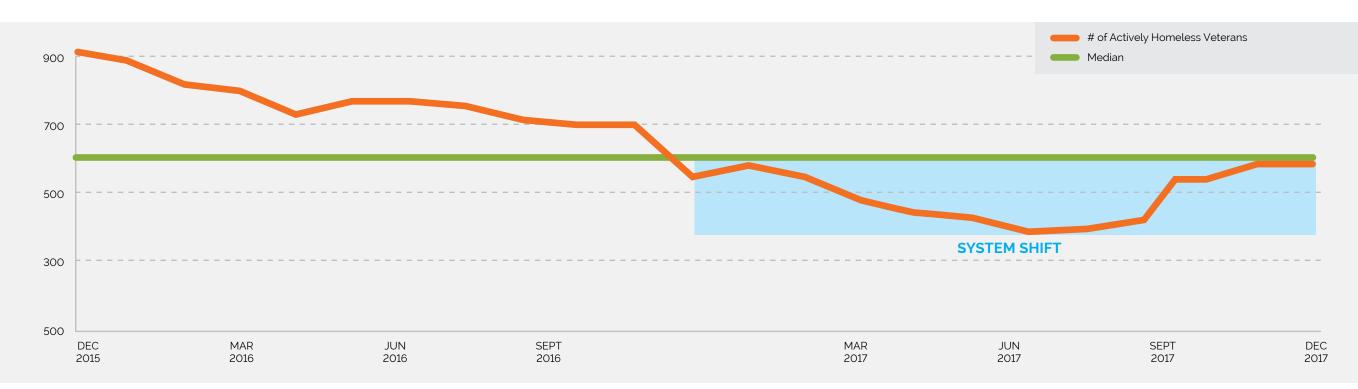
Our learning from the Built for Zero communities reducing homelessness reveals four key elements every community needs in order to reduce homelessness and to build a mechanism capable of constantly solving for homelessness as the problem continues to shift over time.

- + A REAL-TIME FEEDBACK LOOP
- 🕂 A MULTI-AGENCY, COMMAND-CENTER-STYLE TEAM, CAPABLE OF MAKING FAST DECISIONS IN RESPONSE TO THE DATA
- + Flexible resources that can be shifted and reallocated in response to changing information
- A MENU OF PROVEN BEST PRACTICES TO WORK FROM, ORGANIZED ACCORDING TO THE TYPES OF PROBLEMS A COMMUNITY MAY NEED TO SOLVE OVER TIME

CASE STUDY

Chicago, IL: Reducing veteran homelessness

RESULT: Reduced veteran homelessness by 28 percent in a large city over two years



KEY CHANGE IDEAS:

GOAL SETTING:

Chicago set goals for reducing its by-name list of veterans experiencing homelessness and used those goals to drive action across all local stakeholders. Upon achieving a goal, the local team worked together to set a new, more ambitious goal.

THEME-BASED CASE CONFERENCING TO ACCOMMODATE LARGE SCALE:

Because its by-name list is so large, the Chicago team couldn't consider every single person in one meeting. Instead, it designed a schedule for rotating through key themes on a weekly basis: first veterans experiencing chronic homelessness, then long-term shelter stayers, then veterans in VA Grant and Per Diem programs, and finally veterans connected to Rapid Rehousing or SSVF resources who are not yet housed. These portions of the by-name list are now given out to everyone at meetings so that providers can use them to guide their work between meetings.

BIMONTHLY MEETINGS WITH MAYOR'S TEAM:

The Chicago team meets bimonthly with the Mayor's staff to brief them on progress and provide clear requests and communication around helpful things the Mayor could do to advance the effort.

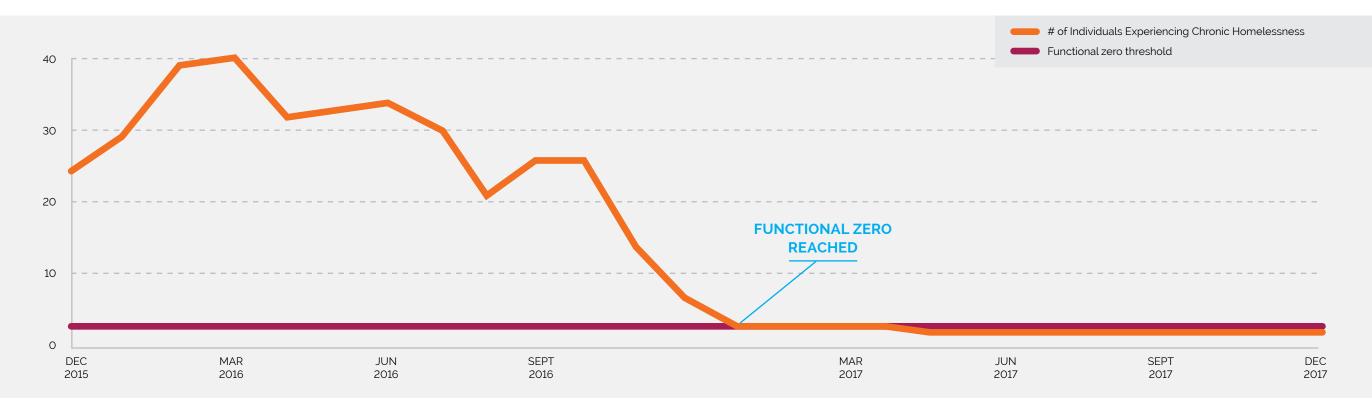
CREATIVE HMIS PROCESSES:

Chicago's data team made use of data sharing within HMIS to allow outreach workers to view current project enrollment and point of contact information for any veteran they cannot find. This gives outreach workers a place to start and has reduced the number of times the team loses track of veterans it is trying to house.

CASE STUDY

Rockford, IL: Reducing chronic homelessness

RESULT: Reduced chronic homelessness to functional zero over a period of 12 months



KEY CHANGE IDEAS:

GOAL SETTING: Rockford set goals for reducing its by-name list of people experiencing chronic homelessness and used those goals to drive action across all local stakeholders. Upon achieving a goal, the local team worked together to set a new, more ambitious goal.

BY-NAME LIST CASE CONFERENCING: Upon

achieving a quality by-name list, Rockford began using this list to drive a monthly case conferencing meeting in which all local housing and service providers reviewed each person's status and needs, identified next steps for each case, and assigned those responsibilities to someone in the room. **CREATIVE STREET OUTREACH PRACTICES:** After its by-name list revealed that many of the most vulnerable people experiencing chronic homelessness regularly frequented a faith-based community center, the Rockford team launched a targeted outreach partnership with that center to get those people housed. The team also rewrote its assessment and case management practices to allow street outreach teams to complete assessments and build housing plans with clients in the field, rather than requiring people to come in to a service provider or other access point.

SUSTAINABILITY

The dream of ending homelessness is not new in America. As we get closer to making that dream a reality, we must think urgently about sustainability. After all, if we did all of this work only to see the numbers creep up again, what was it all for?



The real measure of our success isn't whether we can get to zero, it's whether we can hold it. To be honest, holding it might be the only thing that matters.

Sustainability: **the real end game**

As we have learned more about the dynamic nature of homelessness, it has become increasingly clear that sustainability will require a continual solving for the problem as it shifts and changes. Keeping homelessness rare, brief and non-recurring will require that communities have excellent mechanisms for identifying when their residents experience housing crises and responding quickly, even when those crises are unanticipated.

As with the definition of an end to chronic and veteran homelessness, the sector lacked a measure of sustainability when we began this work in 2015. Over time, as we witnessed the ability of national measures to drive behavior on the ground, we identified this gap as a significant threat to progress. In the absence of a clear sustainability measure, there are no guaranteed political consequences when homelessness begins to rise again.

Our team worried that the goal of ending veteran homelessness would become a checkbox, which, once ticked, could be touted forever, rather than a meaningful outcome to achieve and sustain on behalf of our most vulnerable neighbors who have served our country.

Recognizing this risk, the Built for Zero team has articulated and continued to iterate measurable definitions of sustainability for both veteran and chronic homelessness, and to work with communities on achieving and holding these gains. To date, among the three communities that have ended chronic homelessness and the seven that have ended veteran homelessness, 89% continue to sustain those results. (One community, Rockford, IL, has now ended both.)

A few points are worth noting before we consider these definitions: first, what are the potential learning benefits of studying sustainability? We see at least a few. For one thing, tracking sustainability allows us to understand what kinds of ongoing resource investments may be necessary for communities to maintain an end to homelessness over time, and to separate these from the surge-style investments that have been required to help communities get over the line in the first place. Additionally, this focus helps us to think more rigorously about the question of inflow, which necessarily becomes the chief project of any community that has already found housing for the initial backlog of people living on its streets and in its shelters. Thirdly, tracking sustainability allows us to understand how homelessness might be ended for multiple populations at once. Many of the Built for Zero communities that have ended chronic or veteran homelessness are now using those populations as a balancing measure as they expand their work to target families and youth. The fundamental question for their data teams has become, "Can we do two things at once without sacrificing our gains?" Finally, the ability to track and demonstrate sustainability is an important win for social change agents more broadly because it makes our achievements on homelessness real to the public. Sustainability makes the notion of an end to homelessness credible, and this provides hopeful ammunition to anyone seeking to prove that it is similarly possible to understand and end other complex social problems over time.

VETERANS SUSTAINABILITY DEFINITION

According to the Built for Zero standards, a community has reached an end to veteran homelessness when the number of veterans experiencing homelessness is less than the number a community has demonstrated it can actually house in a routine month. To sustain an end, a community need simply hold below this number in perpetuity.

ACTIVELY HOMELESS VETERANS WHEN COMMUNITY REACHED FUNCTIONAL ZERO

The strengths of this definition are obvious: it is simple, clear and objectively measurable. It is also tied to a community's actual data, which requires each community to track and monitor veteran homelessness over time. The definition also has weaknesses, however. For one thing, the definition does not consider length of time homeless, which means a community could have the same, small group of veterans stuck on its streets month after month with no incentive to house them. (We have yet to see this phenomenon, but it is possible.) We have begun to consider revisions to the definition of sustainability, one of which might simply be that no veteran ever experiences homelessness in a community for more than a single month. This would make the number of veterans experiencing homelessness less important, provided they could be housed very quickly— stock and flow analysis in its purest form.

The value of zero: Unlocking support from new investors

When people experiencing chronic homelessness secure housing, their costs go down dramatically in nonhomeless systems, like healthcare and criminal justice. So why have these systems declined for so long to fund housing efforts?

"When you house a chronically homeless person, their individual costs may go down, but my overall expenses don't," explains one healthcare professional. "That's because there's another person coming along right behind them."

This underscores a key need to track sustained reductions at the community level, rather than simply housing placements or individual housing outcomes. Hospitals and public systems only reap significant value when a community experiences zero, or steadily reducing, chronic homelessness.

In 2018, the Built for Zero team will begin exploring innovative financial models and new collaborations with the healthcare system designed to incentivize reductions in the number of people experiencing chronic homelessness across whole communities.

CHRONIC SUSTAINABILITY DEFINITION

According to both federal and Built for Zero standards, a community has reached an end to chronic homelessness when the number of people experiencing chronic homelessness is zero, or if not zero, either three or less than .1% of that community's most recent individual point-in-time total, and when this has been true for at least 90 days. To sustain an end to chronic homelessness, a community need simply hold below this number (3 or .1%) in perpetuity.



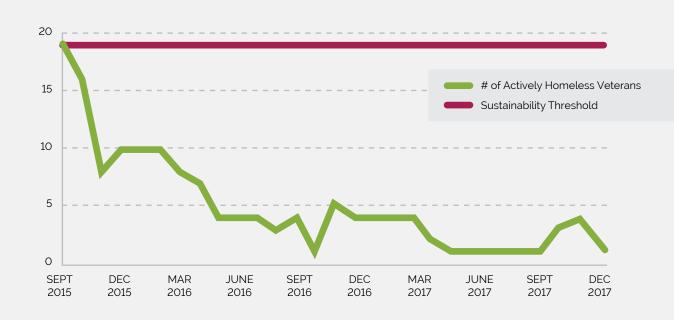
Like the veterans definition of sustainability, this definition is clear and objectively measurable. It also holds out the possibility of a hard zero, which makes sense because chronic homelessness is a function of time and communities have up to a year to house someone before they qualify as chronically homeless. (A veteran, on the other hand, qualifies as a homeless veteran the first day he or she falls into homelessness.) The definition also has key weaknesses. For one thing, it is measured with respect to point-in-time count data, which our own analysis has revealed to be inconsistent and unreliable. Additionally, because this data is only captured once a year, the definition does not encourage constant vigilance. (A community could, in theory, allow people to remain on its streets all year and then sprint to house them in the final month before the PiT count.)



CASE STUDY

Gulf Coast, MS: Sustaining an end to

veteran homelessness



RESULT: Ended veteran homelessness September 2015, sustaining for +2 years

KEY LEARNINGS:

- **CONTINUED COORDINATION**: Gulf Coast hit functional zero more than two years ago, but rather than declare victory and move on, they have continued to operate the coordinated, multi-agency infrastructure that got them to zero in the first place. Their by-name list remains up to date in real time, and the community has adopted a posture of constant vigilance that has allowed it to continue to drive veteran homelessness down toward a hard zero.
- STRONG RELATIONSHIP WITH VA MEDICAL CENTER: The Gulf Coast team has found that reducing inflow is critical to sustaining functional zero. They have therefore worked to maintain a strong relationship with the local VA Medical Center with an eye toward preventing new veterans from falling into homelessness whenever possible.

CASE STUDY

Bergen County, NJ: Sustaining an end to chronic homelessness



RESULT: Ending chronic homelessness in June 2016, sustaining for +1 year

KEY LEARNINGS:

• EXPANDED BY-NAME LIST: Because chronic homelessness is a function of time, the task of ending chronic homelessness requires communities to go upstream to prevent people from aging into chronicity. Many communities in Bergen County have therefore established real-time lists of all people experiencing homelessness, not just those who qualify as chronic. As people get closer and closer to aging into chronicity, urgency around their cases swells. The Bergen team is now working to drive down the average time that any person experiences homelessness with a goal of making chronic homelessness a distant memory.

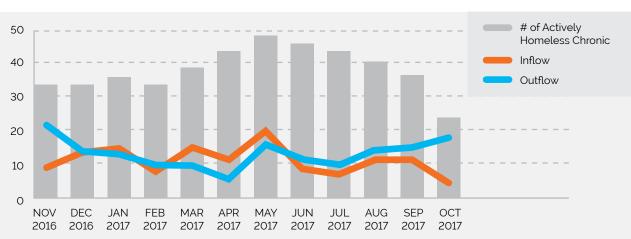
CONCLUSION

History offers strong evidence for the idea that knowledge is a self-compounding phenomenon. The more we know, the faster we learn, and the better the outcomes we can achieve together (See: computer processing, biomedical research, etc.). This insight is the driving force behind this report and our ongoing efforts to maintain an accessible and transparent data infrastructure. If our primary goal for the last three years has been to learn what it takes to end chronic and veteran homelessness in communities and to sustain those results, a strong secondary aim is to illuminate a new path for the housing and homelessness sectors, and indeed the nonprofit sector more broadly, toward a new mindset and accompanying infrastructure for testing new ideas, measuring the outcomes, and applying the best lessons quickly in the service of definable end states.

The arc of our learning follows a classic innovation trajectory: we began with a strong hypothesis about what it would take to get to zero, we tested that hypothesis intensively with communities, and the flaws we discovered at each stage ultimately surfaced the answers we needed to continue moving forward. With ten community proof points, and with essential local process milestones now well defined, we continue our work with a renewed confidence in the idea that communities can end chronic and veteran homelessness if they are willing to measure and problem solve differently, and if we deploy adequate housing and service resources through this improved, more accountable system.

More learning is needed to accelerate and spread this approach. In particular, our work has surfaced a need to learn our way into solutions in four key areas:

1. INFLOW: Our sector has historically been focused on developing and improving interventions around housing outcomes (Rapid Rehousing, Housing First, Permanent Supportive Housing, Progressive Engagement). We now need to adopt a similar focus on using community level by-name list data in order to better understand and test solutions around reducing inflow. The data from Built for Zero communities demonstrates that the majority of communities, especially communities working at large scale, will not be able to get to zero without clear strategies and results around reducing inflow while also accelerating housing placements.



The following chart demonstrates one data-driven way of thinking about and setting goals around inflow reduction.

When inflow is significantly greater than outflow, we see the number of people actively experiencing homelessness increase. When the trend reverses, the number of people actively experiencing homelessness begins to decline. A practical goal for any community is to keep the two lines as far apart as possible, with inflow consistently growing smaller and smaller in relation to outflow.

One of the things that makes the task of inflow reduction so challenging is that it asks the homeless services system to manage outcomes it does not fundamentally control. We must be clear-eyed about the fact that inflow into homelessness is always a negative outcome measure for another failing system, often more than one. Traditionally, the sector has called for structural change in mainstream systems (e.g. healthcare, criminal justice) and additional investments in affordable housing in order to address the challenges of inflow. Collectively, we should continue to advocate urgently for these things.

Still, resources are not a panacea, and structural change often plays out over decades. How might we make ongoing progress, even as we continue our advocacy?

The by-name list offers a way forward. We believe the future in sustaining communities involves using byname list data to make inflow an outcome measure for upstream systems. This data provides communities with a concrete foundation for targeted upstream partnerships that can facilitate systems design and quality improvement efforts in those systems over time.

Our sector should be at the forefront of exploring how we might use monthly, person-specific, local data on those entering homelessness to identify patterns and test multisystem process improvement strategies to reduce this inflow.

We believe communities can dramatically reduce inflow into homelessness if the public systems that touch people on their way to the streets grow tighter, more coordinated, and more data-driven— the same outcome that Built for Zero teams have endeavored to achieve in local housing and homeless services systems.

2. WORKING AT SCALE: Our team has always been skeptical of the idea that smaller communities would have an easier time ending homelessness than larger ones, since resources are typically scaled in relation to a community's size and the number of its residents experiencing homelessness, and because our end state measure for communities is constructed entirely in relation to local data. Yet, smaller communities participating in Built for Zero have moved undeniably faster than larger and more urban communities. Through data analysis and participant interviews, we've identified some key reasons for this:

 Tighter rental markets in many larger, more rapidly growing communities have reduced the number of landlords willing to take federal rental subsidy vouchers, which are often less lucrative than market rents. In response, we have developed strategies and materials to help communities target and engage new landlords. We have also worked to elevate national bright spots like the Atlanta Real Estate Collaborative, which has engaged private landlords to seek out and ready units for people exiting homelessness, and HOM, Inc., which has developed a model for outsourcing key voucher administration functions to create economies of scale for local housing authorities. Even these exemplary programs are now seeing marketbased limits to their ability to secure units. Finally, we are in the process of testing a new approach to the financing and rapid rehabilitation of apartments with the express aim of renting to homeless veterans by leveraging federal rent subsidies to make private money cheaper, thereby eliminating the need for tax credit-based approaches and the slow pace that so often accompanies them.

- Even if all existing housing and service resources could be successfully utilized, many large communities will simply need more of these resources to address the full scale of chronic homelessness.
- Larger communities are far more likely than smaller communities to have large numbers of veterans living in VA Grant and Per Diem housing (GPD). The program's current per diem pay structure provides a disincentive for operators to move veterans on to more permanent housing options. To address this problem, we have helped communities engage a group of large, national GPD providers to develop models for transitioning veterans more quickly into permanent housing without creating an existential threat to GPD programs and their ability to provide other important services in the community, such as workforce training and drug and alcohol treatment.
- Influence and quality control are more difficult to achieve in larger communities, where leaders must spur consistent behavior across a system in which it is impossible to control or influence each actor directly. In the last year, our team has begun to work intentionally to understand what types of support and approaches to the work are unique to large cities and counties. Our learning to date has confirmed how critical it is to focus on shrinking the change, problem-solving capabilities and structures, as well as rapid cycle testing in these contexts. We have also come to believe that large balance of state Continuums of Care should be redesigned and broken down into smaller jurisdictions. Balance of state CoCs have struggled to make progress in Built for Zero, and we believe this is, in part, owing to their unique geographic challenges. The Texas Balance of State, for example, comprises an area larger than most US states. The idea that a single entity can meaningfully coordinate an effective response to homelessness across that entire area is ludicrous and a disservice to thousands of people in crisis across the country, especially in light of the fact that these largest CoCs often receive the smallest coordinating and planning allocations.. A similar thing could likely be said about the Los Angeles CoC, which is responsible for more than 80 individual communities and over ten million people across some 4,700 square miles.

3. EVOLVING OUR FUNDING AND GOVERNANCE STRUCTURES: Typically, the entity charged with operationalizing a community's commitment to ending homelessness is the Continuum of Care (CoC). We must remember what a unique coordinating vehicle the CoC structure offers for aligning funding and program performance behind evidence-backed priorities. Having said that, the existing CoC structure and funding formula is ripe for disruption. These unique entities cannot take responsibility for measuring and driving an end to homelessness in their communities as long as their dominant responsibility is the administration of federal funding. When funding is tight or NOFA deadlines loom, system improvement work will always be the first thing to be sidelined because ultimately, it doesn't keep crucial program dollars coming in the door.

In recent years, HUD has developed system performance measures in an attempt to evaluate local systemwide outcomes, not just program-wide outcomes. This is a positive step, but the most important question is not what data a community is collecting but how and how frequently it is using that data to drive improvement. To be successful, we must evolve the traditional Continuum of Care design to more closely mirror the types of action-oriented structures that have achieved results in other fields. Realigned investments in continuous improvement skills, problem-solving capabilities and the data capacity of CoC staff would pay significant dividends, as they have in the public health space, where real-time data and agile response teams have been central to driving down disease. Our initial hypothesis is that we ought to look to such structures in public health and emergency management for new models to inform our thinking.

4. AWAKENING TO THE TECHNOLOGY NEEDS OF OUR SECTOR: A shocking fact of life in housing and homeless services is that, in many communities, information technology is the largest remaining barrier to reaching functional zero. At a time when technology has never been more advanced, widespread and customizable, the HMIS landscape has become a cottage industry in which communities often feel powerless to move beyond the compliance needs of government or the financial interests of vendors. We must face into the reality that HMIS was imagined long before we truly understand what we would need technology to do for us on the ground. Today, in most communities, HMIS fails to perform the most basic of functions: the easy design and production of custom reports, the real-time tracking of clients through the housing process, the automated matching of clients to appropriate and available resources, and the compiling of basic analytics that can help communities use data for improvement, rather than compliance or judgment.

These tasks are not challenging. In fact, some version of each of these functions is built into nearly every technological application most of us use on a daily basis. What holds HMIS back is an outdated and overly prescriptive regulatory framework in desperate need of reinvention and a cadre of vendors whose business model is tied to the preservation of that regulatory regime. In short, HMIS is a vendor-driven technology, not a user-driven one. It has persisted as such for two reasons: first, it is hermetically sealed apart from the competition that could be posed by the technology sector at large; and second, it is structurally disincentivized from serving the needs of its users. For evidence of this, look no further than the six-figure cost that many communities must incur if they wish to switch vendors because they do not own their own data on homelessness.

If we are serious about helping communities build and use real-time, by-name lists as outlined in this report, if we want them to leverage data daily for precise and proactive decision making, if we wish to empower them with the tools they need to end homelessness in our lifetimes, we must restructure the HMIS market with community actors and those experiencing homelessness at the center, and we must open that market up to innovation and competition so that it can benefit from and be transformed by the user-centered insights the broader technology sector has developed over the last 15 years.

5. COMMUNICATING PROGRESS AND SUSTAINABILITY: Most people, even many who work in the housing and homeless services sectors, do not believe that ending homelessness is possible. This is in spite of the clear outcomes achieved by Built for Zero communities. The learning and impact from the work of these communities has wide-ranging implications for how our society tackles complex social problems across multiple systems. We need faster, more compelling ways to tell the story of the unprecedented, population-level progress being made and sustained in communities across the country.



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